## INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/11696

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl <sup>7</sup> B25J5/00, 19/00			
Inc. c1 B2303/00, 19/00			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documen tation searched (classification system followed by classification symbols)			
Int.Cl <sup>7</sup> B25J1/00-21/02			
· ·			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Jitsuyo Shinan Koho 1926-1996 Kokai Jitsuyo Shinan Koho 1971-2003 Toroku Jitsuyo Shinan Koho 1994-2003			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) JOIS (JICST)			
0015(01051)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
X Y	Mitsuharu MORISAWA et al., "K		1-3 4-6
A	Anteika Seigyo", The Institute of Electrical 7		
	Engineers of Japan Sangyo Keisoku Seigyo Kenkyukai Shiryo, 17 February, 2003 (17.02.03),		
	Vol.IIC·03, No.15·29. 32·44,		
Y	JP 11-300560 A (Okuma Corp.),		4-6
	02 November, 1999 (02.11.99),		
	<pre>Full text; all drawings (Family: none)</pre>		
P,X	JP 2003-291080 A (Kabushiki Kaisha Temuzakku), 1-7 14 October, 2003 (14.10.03),		1-7
.,			_ ,
	Full text; all drawings (Family: none)		
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Furth	er docurrients are listed in the continuation of Box C.	See patent family annex.	
		"T" later document published after the inte priority date and not in conflict with the	
considered to be of particular relevance		"X" understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
date "L" document which may throw doubts on priority claim(s) or which is			
special	establish the publication date of another citation or other reason (as specified)	"Y" document of particular relevance; the considered to involve an inventive step	when the document is
"O" document referring to an oral disclosure, use, exhibition or other means		combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"P" document published prior to the international filing date but later "&" document member of the same patent family than the priority date claimed			
Date of the actual completion of the international search 01 December, 2003 (01.12.03)		Date of mailing of the international search report 13 January, 2004 (13.01.04)	
Name and mailing ad dress of the ISA/		Authorized officer	
Japanese Patent Office			
Facsimile No.		Telephone No.	